Level: PhD
Course title: Advanced Analytical Chemistry (DSH-606)
Status: Elective
ECTS: 15
Requirements: None

**Learning objectives**
- Expanding the previously acquired knowledge on acid-base equilibria in aqueous and nonaqueous systems.
- Introducing students to interactions in multicomponent homogenous systems.
- Enabling students to apply their knowledge in analytical and separation procedures.
- Enabling students for independent solving of complex analytical problems related analysis of unknown sample.
- Enabling students to apply mathematical and data processing methods in analytical chemistry.

**Learning outcomes**
*After successful completion of the course, a student is able to:*
- list and explain interactions in multicomponent homogenous equilibria;
- solve analytical problems related to different homogeneous equilibria processes in solutions;
- apply mathematical equations and computer statistical programs in expression of analytical results;
- adequately operate instruments in analysis of an unknown sample.

**Syllabus**
*Theoretical instructions*

*Other forms of teaching*
Review of the literature. Project preparation.

**Weekly teaching load**

<table>
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<tr>
<th>Lectures: 5</th>
<th>Exercises:</th>
<th>Other forms of teaching:</th>
<th>Student research: 5</th>
<th>Other:</th>
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